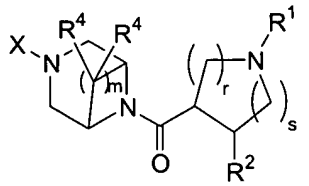
IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A compound of structural formula I:



(I)

or a pharmaceutically acceptable salt thereof; wherein

X is selected from the group consisting of

(1) C_{1-8} alkyl,

(2) $-(CH_2)_nC_{3-8}$ cycloalkyl,

(3) $-(CH_2)_n$-phenyl,

(4) $-(CH_2)_n$-naphthyl,

(5) $-(CH_2)_n$-heteroaryl,

(6) $-(CH_2)_n$heterocycloalkyl,

(7) $-(CH_2)_nC(R^5)(R^6)(R^7)$,

(8) $-(CH_2)_nC{\equiv}N$,

(9) $-(CH_2)_nCON(R^8)_2$,

(10) $-(CH_2)_nCO_2R^8$,

(11) $-(CH_2)_nCOR^8$,

(12) $-(CH_2)_nNR^8C(O)R^8$,

(13) $-(CH_2)_nNR^8CO_2R^8$,

(14) $-(CH_2)_nNR^8C(O)N(R^8)_2$,

(15) $-(CH_2)_nNR^8SO_2R^8$,

(16) $-(CH_2)_nS(O)_pR^8$,

(17) $-(CH_2)_nSO_2N(R^8)_2$,

(18) $-(CH_2)_nOR^8$,

(19) $-(CH_2)_nOC(O)R^8$,

(20) $-(CH_2)_nOC(O)OR^8$,

(21) $-(CH_2)_nOC(O)N(R^8)_2$,

(22) $-(CH_2)_nN(R^8)_2$, and

(23) $-(CH_2)_nNR^8SO_2N(R^8)_2$,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, cycloalkyl, and heterocycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in X is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^1 is selected from the group consisting of

(1) hydrogen,

(2) amidino,

(3) C_{1-4} alkyliminoyl,

(4) C_{1-10} alkyl,

(5) $-(CH_2)_n$-C_{3-7} cycloalkyl,

(6) $-(CH_2)_n$-phenyl,

(7) $-(CH_2)_n$-naphthyl, and

(8) $-(CH_2)_n$-heteroaryl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo;

R^2 is selected from the group consisting of

(1) phenyl,

(2) naphthyl, and

(3) heteroaryl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3;

each R^3 is independently selected from the group consisting of

(1) C_{1-8} alkyl,

(2) C_{2-8} alkenyl,

(3) $-(CH_2)_n$-phenyl,

(4) -$(CH_2)_n$-naphthyl,
(5) -$(CH_2)_n$-heteroaryl,
(6) -$(CH_2)_n$$C_{2-7}$ heterocycloalkyl,
(7) -$(CH_2)_n$$C_{3-7}$ cycloalkyl,
(8) halogen,
(9) OR^9,
(10) -$(CH_2)_n$$C(O)R^9$,
(11) -$(CH_2)_n$$OC(O)R^9$,
(12) -$(CH_2)_n$$C(O)OR^9$,
(13) -$(CH_2)_n$$C\equiv N$,
(14) NO_2,
(15) -$(CH_2)_n$$N(R^9)_2$,
(16) -$(CH_2)_n$$C(O)N(R^9)_2$,
(17) -$(CH_2)_n$$NR^9C(O)R^9$,
(18) -$(CH_2)_n$$NR^9C(O)OR^9$,
(19) -$(CH_2)_n$$NR^9C(O)$-heteroaryl,
(20) -$(CH_2)_n$$NR^9C(O)N(R^9)_2$,
(21) -$(CH_2)_n$$C(O)NR^9N(R^9)_2$,
(22) -$(CH_2)_n$$C(O)NR^9NR^9C(O)R^9$,
(23) -$(CH_2)_n$$NR^9S(O)_pR^9$,
(24) -$(CH_2)_n$$S(O)_pN(R^9)_2$,
(25) -$(CH_2)_n$$S(O)_pR^9$,
(26) $O(CH_2)_n$$C(O)N(R^9)_2$,
(27) CF_3,
(28) CH_2CF_3,
(29) OCF_3, and
(30) OCH_2CF_3,

wherein alkenyl, phenyl, naphthyl, heteroaryl are unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, and wherein any alkyl, cycloalkyl, heterocycloalkyl, and methylene (CH_2) carbon atom in R^3 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, oxo, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, or two R^3 substituents on the same carbon atom are taken together with the carbon atom to form a cyclopropyl group;

each R^4 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) $-(CH_2)_nC_{3-6}$ cycloalkyl,
(4) $-(CH_2)_n$-aryl,
(5) hydroxy,
(6) halogen, and
(7) amino;

R^5 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) C_{2-8} alkenyl,
(4) C_{2-8} alkynyl,
(5) C_{1-8} alkoxy,
(6) $-(CH_2)_nC_{3-7}$ cycloalkyl,
(7) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,
(8) $-(CH_2)_n$-phenyl,
(9) $-(CH_2)_n$-naphthyl,
(10) $-(CH_2)_n$-heteroaryl, and
(11) $-(CH_2)_nC_{3-7}$ bicycloalkyl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in R^5 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^6 is selected from the group consisting of

(1) hydrogen, and
(2) C_{1-8} alkyl;

R^7 is selected from the group consisting of

(1) $-(CH_2)_nN(R^8)_2$,
(2) $-(CH_2)_nNR^8C(O)R^8$,

(3) $-(CH_2)_nNR^8C(O)OR^8$,

(4) $-(CH_2)_nNR^8C(O)N(R^8)_2$,

(5) $-(CH_2)_nNR^8S(O)R^8$,

(6) $-(CH_2)_nNR^8S(O)_2R^8$, and

(7) $-(CH_2)_nNR^8S(O)_2N(R^8)_2$,

wherein any methylene (CH_2) in R^7 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 substituents together with the carbon, nitrogen or sulfur atom to which they are attached form a 5, 6, or 7-membered saturated or unsaturated nitrogen containing ring optionally substituted with one to three groups independently selected from C_{1-8} alkyl and oxo;

each R^8 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) C_{2-8} alkenyl,

(4) $-(CH_2)_nC_{3-7}$ cycloalkyl,

(5) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,

(6) $-(CH_2)_nC_{3-7}$ bicycloalkyl,

(7) $-(CH_2)_n$-phenyl,

(8) $-(CH_2)_n$-naphthyl, and

(9) $-(CH_2)_n$-heteroaryl,

wherein alkyl, alkenyl, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and wherein any methylene (CH_2) in R^8 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 groups together with the atom to which they are attached form a 5- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and $-NC_{1-4}$ alkyl;

each R^9 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) phenyl,

(4) heteroaryl,

(5) -$(CH_2)_n$ heterocycloalkyl, and

(6) C_{3-6} cycloalkyl,

wherein alkyl, phenyl, heteroaryl, heterocycloalkyl, and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from halogen, C_{1-4} alkyl, hydroxy, and C_{1-4} alkoxy, or two R^9 groups together with the atom to which they are attached form a 4- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and -NC_{1-4} alkyl;

r is 1 or 2;

s is 0, 1, or 2;

m is 0, 1, 2, 3, or 4;

n is 0, 1, 2, 3, or 4; and

p is 0, 1, or 2.

2. (original) The compound of Claim 1 wherein R^1 is selected from the group consisting of hydrogen, C_{1-6} alkyl, -$(CH_2)_{0-1}C_{3-6}$ cycloalkyl, and -$(CH_2)_{0-1}$-phenyl, wherein phenyl is unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl and cycloalkyl are optionally substituted with one to three groups independently selected from R^3 and oxo; and pharmaceutically acceptable salts thereof.

3. (original) The compound of Claim 1 wherein R^2 is phenyl or thienyl, optionally substituted with one to three groups independently selected from R^3; and pharmaceutically acceptable salts thereof.

4. (original) The compound of Claim 3 wherein R^2 is phenyl optionally substituted with one to three groups independently selected from R^3; and pharmaceutically acceptable salts thereof.

5. (original) The compound of Claim 1 wherein each R^4 is independently selected from the group consisting of hydrogen, halogen, or hydroxy; and pharmaceutically acceptable salts thereof.

6. (original) The compound of Claim 1 wherein X is selected from the group consisting of

(1) C_{1-8} alkyl,

(2) -$(CH_2)_nC_{3-8}$ cycloalkyl,

(3) -$(CH_2)_n$-phenyl,

(4) -$(CH_2)_n$-heteroaryl,

(5) -$(CH_2)_n$heterocycloalkyl, and

(6) -$(CH_2)_nC(R^5)(R^6)(R^7)$,

wherein phenyl and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, cycloalkyl, and heterocycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in X is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl; and pharmaceutically acceptable salts thereof.

7. (original) The compound of Claim 6 wherein X is phenyl or heteroaryl optionally substituted with one to three groups independently selected from R^3; and pharmaceutically acceptable salts thereof.

8. (original) The compound of Claim 7 wherein X is phenyl optionally substituted with one to three groups independently selected from R^3; and pharmaceutically acceptable salts thereof.

9. (original) The compound of Claim 6 wherein X is -$(CH_2)_nC(R^5)(R^6)(R^7)$; and pharmaceutically acceptable salts thereof.

10. (original) The compound of Claim 9 wherein

n is 0;

R^5 is selected from the group consisting of

(1) C_{1-8} alkyl,

(2) -$(CH_2)_nC_{3-7}$ cycloalkyl,

(3) -$(CH_2)_nC_{2-7}$ heterocycloalkyl,

(4) -$(CH_2)_n$-phenyl, and

(5) -$(CH_2)_n$-heteroaryl,

wherein phenyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, cycloalkyl and heterocycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in R^5 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl; and

R^6 is hydrogen; and

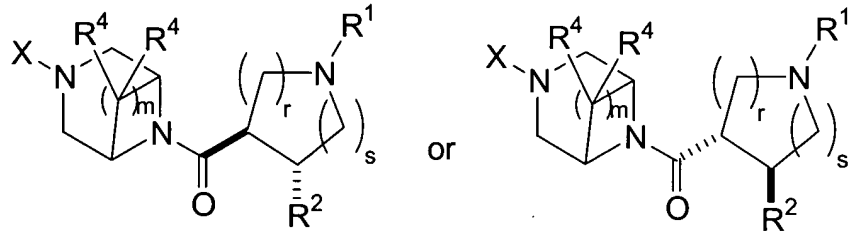
pharmaceutically acceptable salts thereof.

11. (original) The compound of Claim 1 wherein r is 1.

12. (original) The compound of Claim 1 wherein r is 2.

13. (original) The compound of Claim 1 wherein R^2 is phenyl substituted with one to three groups independently selected from R^3.

14. (original) The compound of Claim 1 of structural formula IIa or IIb of the indicated *trans* relative stereochemical configuration:



(IIa) (IIb)

or a pharmaceutically acceptable salt thereof;
wherein

X is selected from the group consisting of

(1) C_{1-8} alkyl,

(2) $-(CH_2)_nC_{3-8}$ cycloalkyl,

(3) $-(CH_2)_n$-phenyl,

(4) $-(CH_2)_n$-heteroaryl,

(5) $-(CH_2)_n$heterocycloalkyl, and

(6) $-(CH_2)_nC(R^5)(R^6)(R^7)$,

wherein phenyl and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, cycloalkyl, and heterocycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in X is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^1 is selected from the group consisting of hydrogen, amidino, C_{1-4} alkyliminoyl, C_{1-6} alkyl, C_{5-6} cycloalkyl, $-(CH_2)_{0-1}$ phenyl, and $-(CH_2)_{0-1}$ heteroaryl, wherein phenyl and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo;

R^2 is phenyl or thienyl, optionally substituted with one to three groups independently selected from R^3;

each R^3 is independently selected from the group consisting of

(1) C_{1-8} alkyl,
(2) C_{2-8} alkenyl,
(3) $-(CH_2)_n$-phenyl,
(4) $-(CH_2)_n$-naphthyl,
(5) $-(CH_2)_n$-heteroaryl,
(6) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,
(7) $-(CH_2)_nC_{3-7}$ cycloalkyl,
(8) halogen,
(9) OR^9,
(10) $-(CH_2)_nC(O)R^9$,
(11) $-(CH_2)_nOC(O)R^9$,
(12) $-(CH_2)_nC(O)OR^9$,
(13) $-(CH_2)_nC{\equiv}N$,
(14) NO_2,
(15) $-(CH_2)_nN(R^9)_2$,
(16) $-(CH_2)_nC(O)N(R^9)_2$,
(17) $-(CH_2)_nNR^9C(O)R^9$,
(18) $-(CH_2)_nNR^9C(O)OR^9$,
(19) $-(CH_2)_nNR^9C(O)$-heteroaryl,
(20) $-(CH_2)_nNR^9C(O)N(R^9)_2$,
(21) $-(CH_2)_nC(O)NR^9N(R^9)_2$,
(22) $-(CH_2)_nC(O)NR^9NR^9C(O)R^9$,
(23) $-(CH_2)_nNR^9S(O)_pR^9$,
(24) $-(CH_2)_nS(O)_pN(R^9)_2$,
(25) $-(CH_2)_nS(O)_pR^9$,
(26) $O(CH_2)_nC(O)N(R^9)_2$,
(27) CF_3,

(28) CH_2CF_3,

(29) OCF_3, and

(30) OCH_2CF_3,

wherein alkenyl, phenyl, naphthyl, heteroaryl are unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, and wherein any alkyl, cycloalkyl, heterocycloalkyl, and methylene (CH_2) carbon atom in R^3 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, oxo, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, or two R^3 substituents on the same carbon atom are taken together with the carbon atom to form a cyclopropyl group;

each R^4 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) $-(CH_2)_{0-1}C_{3-6}$ cycloalkyl,

(4) $-(CH_2)_{0-1}$-aryl,

(5) hydroxy,

(6) halogen, and

(7) amino;

R^5 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) C_{2-8} alkenyl,

(4) C_{2-8} alkynyl,

(5) C_{1-8} alkoxy,

(6) $-(CH_2)_nC_{3-7}$ cycloalkyl,

(7) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,

(8) $-(CH_2)_n$-phenyl,

(9) $-(CH_2)_n$-naphthyl,

(10) $-(CH_2)_n$-heteroaryl, and

(11) $-(CH_2)_nC_{3-7}$ bicycloalkyl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and

oxo, and wherein any methylene (CH_2) in R^5 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^6 is selected from the group consisting of

(1) hydrogen, and
(2) C_{1-8} alkyl;

R^7 is selected from the group consisting of

(1) $-(CH_2)_nN(R^8)_2$,
(2) $-(CH_2)_nNR^8C(O)R^8$,
(3) $-(CH_2)_nNR^8C(O)OR^8$,
(4) $-(CH_2)_nNR^8C(O)N(R^8)_2$,
(5) $-(CH_2)_nNR^8S(O)R^8$,
(6) $-(CH_2)_nNR^8S(O)_2R^8$, and
(7) $-(CH_2)_nNR^8S(O)_2N(R^8)_2$,

wherein any methylene (CH_2) in R^7 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 substituents together with the carbon, nitrogen or sulfur atom to which they are attached form a 5, 6, or 7-membered saturated or unsaturated nitrogen containing ring optionally substituted with one to three groups independently selected from C_{1-8} alkyl and oxo;

each R^8 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) C_{2-8} alkenyl,
(4) $-(CH_2)_nC_{3-7}$ cycloalkyl,
(5) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,
(6) $-(CH_2)_nC_{3-7}$ bicycloalkyl,
(7) $-(CH_2)_n$-phenyl,
(8) $-(CH_2)_n$-naphthyl, and
(9) $-(CH_2)_n$-heteroaryl,

wherein alkyl, alkenyl, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and

wherein any methylene (CH_2) in R^8 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 groups together with the atom to which they are attached form a 5- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and -NC_{1-4} alkyl;

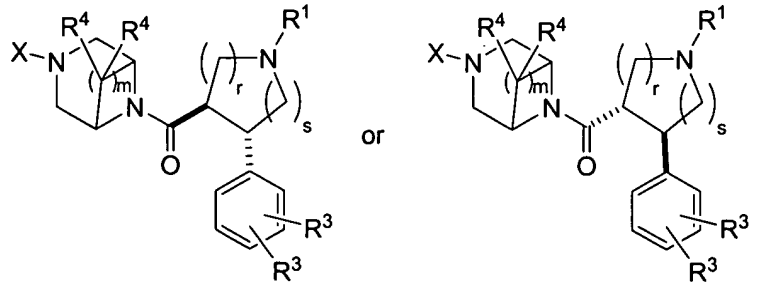
each R^9 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) phenyl,
(4) heteroaryl,
(5) -$(CH_2)_n$ heterocycloalkyl, and
(6) C_{3-6} cycloalkyl,

wherein alkyl, phenyl, heteroaryl, heterocycloalkyl, and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from halogen, C_{1-4} alkyl, hydroxy, and C_{1-4} alkoxy, or two R^9 groups together with the atom to which they are attached form a 4- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and -NC_{1-4} alkyl;

r is 1 or 2;
s is 0, 1 or 2;
m is 0, 1, 2, 3 or 4;
n is 0, 1, 2, 3 or 4; and
p is 0, 1, or 2.

15. (original) The compound of Claim 1 of the following structural formula with the indicated *trans* relative stereochemical configuration:



or a pharmaceutically acceptable salt thereof; wherein

X is selected from the group consisting of

(1) -$(CH_2)_{0-1}$-phenyl,

(2) -$(CH_2)_{0-1}$-heteroaryl, and

(3) -$(CH_2)_{0-1}C(R^5)(R^6)(R^7)$,

wherein phenyl and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and wherein any methylene (CH_2) in X is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^1 is selected from the group consisting of hydrogen, C_{1-4} alkyl, and -$(CH_2)_{0-1}$ phenyl;

each R^3 is independently selected from the group consisting of

(1) C_{1-8} alkyl,

(2) C_{2-8} alkenyl,

(3) -$(CH_2)_{0-1}$-phenyl,

(4) -$(CH_2)_{0-1}$-naphthyl,

(5) -$(CH_2)_{0-1}$-heteroaryl,

(6) -$(CH_2)_{0-1}$-C_{2-7} heterocycloalkyl,

(7) -$(CH_2)_{0-1}$-C_{3-7} cycloalkyl,

(8) halogen,

(9) OR^9,

(10) -$(CH_2)_{0-1}$-$C(O)R^9$,

(11) -$(CH_2)_{0-1}$-$OC(O)R^9$,

(12) -$(CH_2)_{0-1}$-$C(O)OR^9$,

(13) -$(CH_2)_{0-1}$-C≡N,

(14) NO_2,

(15) -$(CH_2)_{0-1}$-$N(R^9)_2$,

(16) -$(CH_2)_{0-1}$-$C(O)N(R^9)_2$,

(17) -$(CH_2)_{0-1}$-$NR^9C(O)R^9$,

(18) -$(CH_2)_{0-1}$-$NR^9C(O)OR^9$,

(19) -$(CH_2)_{0-1}NR^9C(O)$-heteroaryl,

(20) -$(CH_2)_{0-1}NR^9C(O)N(R^9)_2$,

(21) -$(CH_2)_{0-1}C(O)NR^9N(R^9)_2$,

(22) -$(CH_2)_{0-1}$-$C(O)NR^9NR^9C(O)R^9$,

(23) -$(CH_2)_{0-1}$-$NR^9S(O)_{1-2}R^9$,

(24) -$(CH_2)_{0-1}$-$S(O)_{1-2}N(R^9)_2$,

(25) -$(CH_2)_{0-1}$-$S(O)_{0-2}R^9$,

(26) $O(CH_2)_{0-1}$-$C(O)N(R^9)_2$,

(27) CF_3,

(28) CH_2CF_3,

(29) OCF_3, and

(30) OCH_2CF_3,

wherein alkenyl, phenyl, naphthyl, heteroaryl are unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, and wherein any alkyl, cycloalkyl, heterocycloalkyl, and methylene (CH_2) carbon atom in R^3 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, oxo, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, or two R^3 substituents on the same carbon atom are taken together with the carbon atom to form a cyclopropyl group;

each R^4 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) $-(CH_2)_{0-1}-C_{3-6}$ cycloalkyl,

(4) $-(CH_2)_{0-1}$-aryl,

(5) hydroxy,

(6) halogen, and

(7) amino;

R^5 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) C_{2-8} alkenyl,

(4) C_{2-8} alkynyl,

(5) C_{1-8} alkoxy,

(6) $-(CH_2)_{0-1}-C_{3-7}$ cycloalkyl,

(7) $-(CH_2)_{0-1}-C_{2-7}$ heterocycloalkyl,

(8) $-(CH_2)_{0-1}$-phenyl,

(9) $-(CH_2)_{0-1}$-naphthyl,

(10) $-(CH_2)_{0-1}$-heteroaryl, and

(11) $-(CH_2)_{0-1}-C_{3-7}$ bicycloalkyl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, alkenyl, alkynyl, alkoxy, cycloalky, heterocycloalkyl, and

bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in R^5 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^6 is selected from the group consisting of

(1) hydrogen, and
(2) C_{1-8} alkyl;

R^7 is selected from the group consisting of

(1) $-(CH_2)_{0-3}-N(R^8)_2$,
(2) $-(CH_2)_{0-3}-NR^8C(O)R^8$,
(3) $-(CH_2)_{0-3}-NR^8C(O)OR^8$,
(4) $-(CH_2)_{0-3}-NR^8C(O)N(R^8)_2$,
(5) $-(CH_2)_{0-3}-NR^8S(O)R^8$,
(6) $-(CH_2)_{0-3}-NR^8S(O)_2R^8$, and
(7) $-(CH_2)_{0-3}-NR^8S(O)_2N(R^8)_2$,

wherein any methylene (CH_2) in R^7 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 substituents together with the carbon, nitrogen or sulfur atom to which they are attached form a 5, 6, or 7-membered saturated or unsaturated nitrogen containing ring optionally substituted with one to three groups independently selected from C_{1-8} alkyl and oxo;

each R^8 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) C_{2-8} alkenyl,
(4) $-(CH_2)_{0-1}-C_{3-7}$ cycloalkyl,
(5) $-(CH_2)_{0-1}-C_{2-7}$ heterocycloalkyl,
(6) $-(CH_2)_{0-1}-C_{3-7}$ bicycloalkyl,
(7) $-(CH_2)_{0-1}$-phenyl,
(8) $-(CH_2)_{0-1}$-naphthyl, and
(9) $-(CH_2)_{0-1}$-heteroaryl,

wherein alkyl, alkenyl, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein phenyl, naphthyl, and

heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and wherein any methylene (CH_2) in R^8 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 groups together with the atom to which they are attached form a 5- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and -NC_{1-4} alkyl;

each R^9 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) phenyl,
(4) heteroaryl,
(5) -$(CH_2)_{0-1}$ heterocycloalkyl, and
(6) C_{3-6} cycloalkyl,

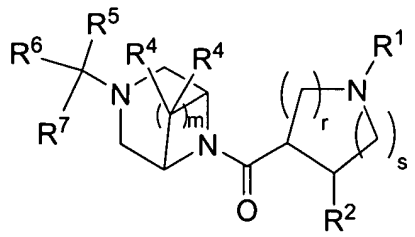
wherein alkyl, phenyl, heteroaryl, heterocycloalkyl, and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from halogen, C_{1-4} alkyl, hydroxy, and C_{1-4} alkoxy, or two R^9 groups together with the atom to which they are attached form a 4- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and -NC_{1-4} alkyl;

r is 1 or 2;

s is 0, 1 or 2; and

m is 0, 1, 2, 3 or 4.

16. (original) A compound of structural formula IV:



IV

or a pharmaceutically acceptable salt thereof; wherein

R^1 is selected from the group consisting of

(1) hydrogen,

(2) amidino,
(3) C_{1-4} alkyliminoyl,
(4) C_{1-10} alkyl,
(5) $-(CH_2)_n-C_{3-7}$ cycloalkyl,
(6) $-(CH_2)_n$-phenyl,
(7) $-(CH_2)_n$-naphthyl, and

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo;

R^2 is selected from the group consisting of

(1) phenyl,
(2) naphthyl, and
(3) heteroaryl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3;

each R^3 is independently selected from the group consisting of

(1) C_{1-8} alkyl,
(2) C_{2-8} alkenyl,
(3) $-(CH_2)_n$-phenyl,
(4) $-(CH_2)_n$-naphthyl,
(5) $-(CH_2)_n$-heteroaryl,
(6) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,
(7) $-(CH_2)_nC_{3-7}$ cycloalkyl,
(8) halogen,
(9) OR^9,
(10) $-(CH_2)_nC(O)R^9$,
(11) $-(CH_2)_nOC(O)R^9$,
(12) $-(CH_2)_nC(O)OR^9$,
(13) $-(CH_2)_nC\equiv N$,
(14) NO_2,
(15) $-(CH_2)_nN(R^9)_2$,
(16) $-(CH_2)_nC(O)N(R^9)_2$,

(17) $-(CH_2)_nNR^9C(O)R^9$,
(18) $-(CH_2)_nNR^9C(O)OR^9$,
(19) $-(CH_2)_nNR^9C(O)$-heteroaryl,
(20) $-(CH_2)_nNR^9C(O)N(R^9)_2$,
(21) $-(CH_2)_nC(O)NR^9N(R^9)_2$,
(22) $-(CH_2)_nC(O)NR^9NR^9C(O)R^9$,
(23) $-(CH_2)_nNR^9S(O)_pR^9$,
(24) $-(CH_2)_nS(O)_pN(R^9)_2$,
(25) $-(CH_2)_nS(O)_pR^9$,
(26) $O(CH_2)_nC(O)N(R^9)_2$,
(27) CF_3,
(28) CH_2CF_3,
(29) OCF_3, and
(30) OCH_2CF_3,

wherein alkenyl, phenyl, naphthyl, heteroaryl are unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, and wherein any alkyl, cycloalkyl, heterocycloalkyl, and methylene (CH_2) carbon atom in R^3 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, oxo, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, or two R^3 substituents on the same carbon atom are taken together with the carbon atom to form a cyclopropyl group;

each R^4 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) $-(CH_2)_nC_{3-6}$ cycloalkyl,
(4) $-(CH_2)_n$-aryl,
(5) hydroxy,
(6) halogen, and
(7) amino;

R^5 is independently selected from the group consisting of

(1) hydrogen,
(2) C_{1-8} alkyl,
(3) C_{2-8} alkenyl,

(4) C_{2-8} alkynyl,

(5) C_{1-8} alkoxy,

(6) $-(CH_2)_nC_{3-7}$ cycloalkyl,

(7) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,

(8) $-(CH_2)_n$-phenyl,

(9) $-(CH_2)_n$-naphthyl,

(10) $-(CH_2)_n$-heteroaryl, and

(11) $-(CH_2)_nC_{3-7}$ bicycloalkyl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in R^5 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^6 is selected from the group consisting of

(1) hydrogen, and

(2) C_{1-8} alkyl;

R^7 is selected from the group consisting of

(1) $-(CH_2)_nN(R^8)_2$,

(2) $-(CH_2)_nNR^8C(O)R^8$,

(3) $-(CH_2)_nNR^8C(O)OR^8$,

(4) $-(CH_2)_nNR^8C(O)N(R^8)_2$,

(5) $-(CH_2)_nNR^8S(O)R^8$,

(6) $-(CH_2)_nNR^8S(O)_2R^8$, and

(7) $-(CH_2)_nNR^8S(O)_2N(R^8)_2$,

wherein any methylene (CH_2) in R^7 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 substituents together with the carbon, nitrogen or sulfur atom to which they are attached form a 5, 6, or 7-membered saturated or unsaturated nitrogen containing ring optionally substituted with one to three groups independently selected from C_{1-8} alkyl and oxo;

each R^8 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) C_{2-8} alkenyl,

(4) $-(CH_2)_nC_{3-7}$ cycloalkyl,

(5) $-(CH_2)_nC_{2-7}$ heterocycloalkyl,

(6) $-(CH_2)_nC_{3-7}$ bicycloalkyl,

(7) $-(CH_2)_n$-phenyl,

(8) $-(CH_2)_n$-naphthyl, and

(9) $-(CH_2)_n$-heteroaryl,

wherein alkyl, alkenyl, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and wherein any methylene (CH_2) in R^8 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 groups together with the atom to which they are attached form a 5- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and $-NC_{1-4}$ alkyl;

each R^9 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) phenyl,

(4) heteroaryl,

(5) $-(CH_2)_n$ heterocycloalkyl, and

(6) C_{3-6} cycloalkyl,

wherein alkyl, phenyl, heteroaryl, heterocycloalkyl, and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from halogen, C_{1-4} alkyl, hydroxy, and C_{1-4} alkoxy, or two R^9 groups together with the atom to which they are attached form a 4- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and $-NC_{1-4}$ alkyl;

r is 1 or 2;

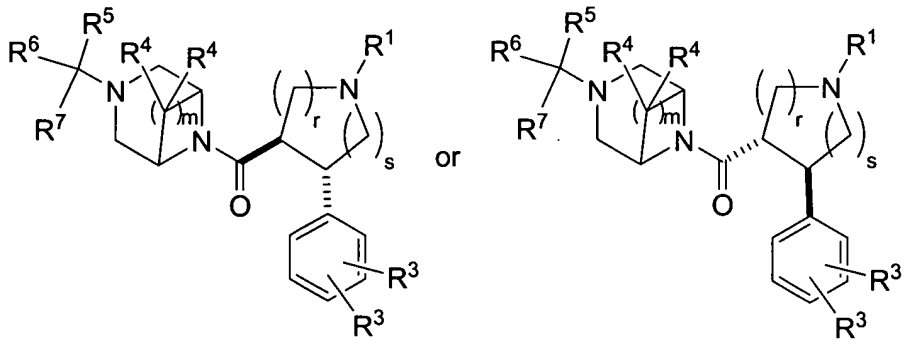
s is 0, 1 or 2;

m is 0, 1, 2, 3, or 4;

n is 0, 1, 2, 3, or 4; and

p is 0, 1, or 2.

17. (original) The compound of Claim 1 of the following structural formula with the indicated *trans* relative stereochemical configuration:



or a pharmaceutically acceptable salt thereof; wherein

R^1 is selected from the group consisting of hydrogen, C_{1-4} alkyl, and $-(CH_2)_{0-1}$ phenyl;

each R^3 is independently selected from the group consisting of

(1) C_{1-8} alkyl,
(2) C_{2-8} alkenyl,
(3) $-(CH_2)_{0-1}$-phenyl,
(4) $-(CH_2)_{0-1}$-naphthyl,
(5) $-(CH_2)_{0-1}$-heteroaryl,
(6) $-(CH_2)_{0-1}-C_{2-7}$ heterocycloalkyl,
(7) $-(CH_2)_{0-1}-C_{3-7}$ cycloalkyl,
(8) halogen,
(9) OR^9,
(10) $-(CH_2)_{0-1}-C(O)R^9$,
(11) $-(CH_2)_{0-1}-OC(O)R^9$,
(12) $-(CH_2)_{0-1}-C(O)OR^9$,
(13) $-(CH_2)_{0-1}-C\equiv N$,
(14) NO_2,
(15) $-(CH_2)_{0-1}-N(R^9)_2$,
(16) $-(CH_2)_{0-1}-C(O)N(R^9)_2$,
(17) $-(CH_2)_{0-1}-NR^9C(O)R^9$,
(18) $-(CH_2)_{0-1}-NR^9C(O)OR^9$,
(19) $-(CH_2)_{0-1}NR^9C(O)$-heteroaryl,

(20) $-(CH_2)_{0-1}NR^9C(O)N(R^9)_2$,

(21) $-(CH_2)_{0-1}C(O)NR^9N(R^9)_2$,

(22) $-(CH_2)_{0-1}-C(O)NR^9NR^9C(O)R^9$,

(23) $-(CH_2)_{0-1}-NR^9S(O)_{1-2}R^9$,

(24) $-(CH_2)_{0-1}-S(O)_{1-2}N(R^9)_2$,

(25) $-(CH_2)_{0-1}-S(O)_{0-2}R^9$,

(26) $O(CH_2)_{0-1}-C(O)N(R^9)_2$,

(27) CF_3,

(28) CH_2CF_3,

(29) OCF_3, and

(30) OCH_2CF_3,

wherein alkenyl, phenyl, naphthyl, heteroaryl are unsubstituted or substituted with one to three substituents independently selected from halogen, hydroxy, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, and wherein any alkyl, cycloalkyl, heterocycloalkyl, and methylene (CH_2) carbon atom in R^3 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, oxo, C_{1-4} alkyl, trifluoromethyl, and C_{1-4} alkoxy, or two R^3 substituents on the same carbon atom are taken together with the carbon atom to form a cyclopropyl group;

each R^4 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) $-(CH_2)_{0-1}-C_{3-6}$ cycloalkyl,

(4) $-(CH_2)_{0-1}$-aryl,

(5) hydroxy,

(6) halogen, and

(7) amino;

R^5 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) C_{2-8} alkenyl,

(4) C_{2-8} alkynyl,

(5) C_{1-8} alkoxy,

(6) $-(CH_2)_{0-1}-C_{3-7}$ cycloalkyl,

(7) -$(CH_2)_{0-1}$-C_{2-7} heterocycloalkyl,

(8) -$(CH_2)_{0-1}$-phenyl,

(9) -$(CH_2)_{0-1}$-naphthyl,

(10) -$(CH_2)_{0-1}$-heteroaryl, and

(11) -$(CH_2)_{0-1}$-C_{3-7} bicycloalkyl,

wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and alkyl, alkenyl, alkynyl, alkoxy, cycloalky, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein any methylene (CH_2) in R^5 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl;

R^6 is selected from the group consisting of

(1) hydrogen, and

(2) C_{1-8} alkyl;

R^7 is selected from the group consisting of

(1) -$(CH_2)_{0-3}$-$N(R^8)_2$,

(2) -$(CH_2)_{0-3}$-$NR^8C(O)R^8$,

(3) -$(CH_2)_{0-3}$-$NR^8C(O)OR^8$,

(4) -$(CH_2)_{0-3}$-$NR^8C(O)N(R^8)_2$,

(5) -$(CH_2)_{0-3}$-$NR^8S(O)R^8$,

(6) -$(CH_2)_{0-3}$-$NR^8S(O)_2R^8$, and

(7) -$(CH_2)_{0-3}$-$NR^8S(O)_2N(R^8)_2$,

wherein any methylene (CH_2) in R^7 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 substituents together with the carbon, nitrogen or sulfur atom to which they are attached form a 5, 6, or 7-membered saturated or unsaturated nitrogen containing ring optionally substituted with one to three groups independently selected from C_{1-8} alkyl and oxo;

each R^8 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) C_{2-8} alkenyl,

(4) -$(CH_2)_{0-1}$-C_{3-7} cycloalkyl,

(5) -$(CH_2)_{0-1}$-C_{2-7} heterocycloalkyl,

(6) -$(CH_2)_{0-1}$-C_{3-7} bicycloalkyl,

(7) -$(CH_2)_{0-1}$-phenyl,

(8) -$(CH_2)_{0-1}$-naphthyl, and

(9) -$(CH_2)_{0-1}$-heteroaryl,

wherein alkyl, alkenyl, cycloalkyl, heterocycloalkyl, and bicycloalkyl are unsubstituted or substituted with one to three groups independently selected from R^3 and oxo, and wherein phenyl, naphthyl, and heteroaryl are unsubstituted or substituted with one to three groups independently selected from R^3, and wherein any methylene (CH_2) in R^8 is unsubstituted or substituted with one to two groups independently selected from halogen, hydroxy, and C_{1-4} alkyl, or two R^8 groups together with the atom to which they are attached form a 5- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and -NC_{1-4} alkyl;

each R^9 is independently selected from the group consisting of

(1) hydrogen,

(2) C_{1-8} alkyl,

(3) phenyl,

(4) heteroaryl,

(5) -$(CH_2)_{0-1}$ heterocycloalkyl, and

(6) C_{3-6} cycloalkyl,

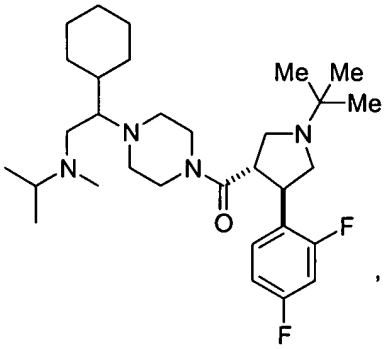
wherein alkyl, phenyl, heteroaryl, heterocycloalkyl, and cycloalkyl are unsubstituted or substituted with one to three groups independently selected from halogen, C_{1-4} alkyl, hydroxy, and C_{1-4} alkoxy, or two R^9 groups together with the atom to which they are attached form a 4- to 8-membered mono- or bicyclic ring system optionally containing an additional heteroatom selected from O, S, and -NC_{1-4} alkyl;

r is 1 or 2;

s is 0, 1 or 2; and

m is 0, 1, 2, 3 or 4.

18. (original) The compound of Claim 1 selected from the group consisting of: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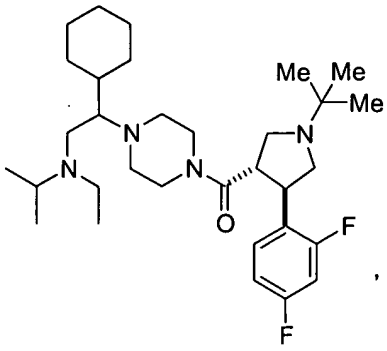
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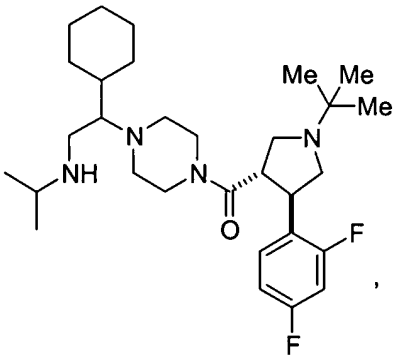
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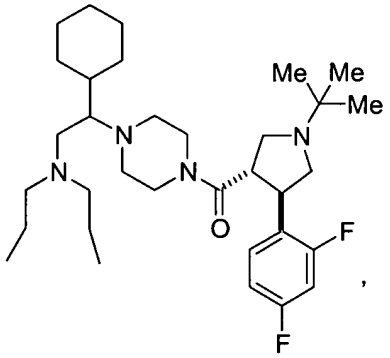
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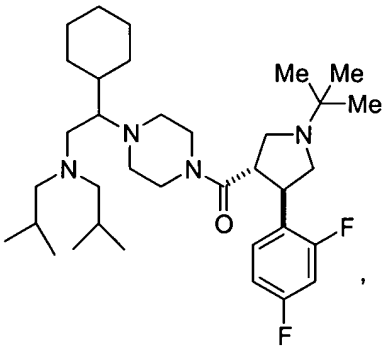
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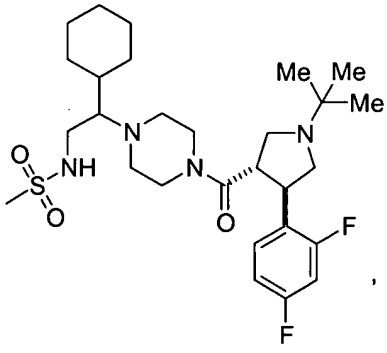
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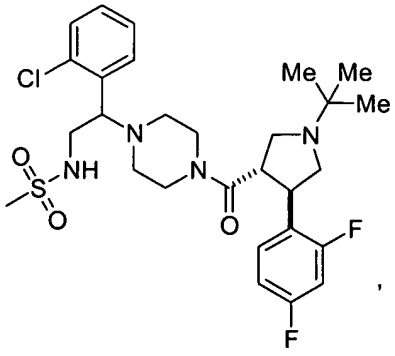
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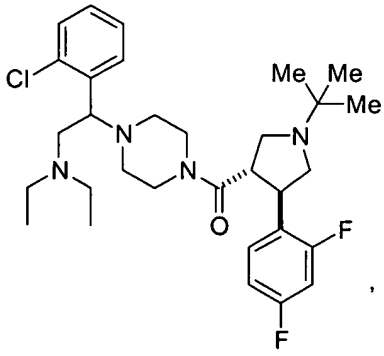
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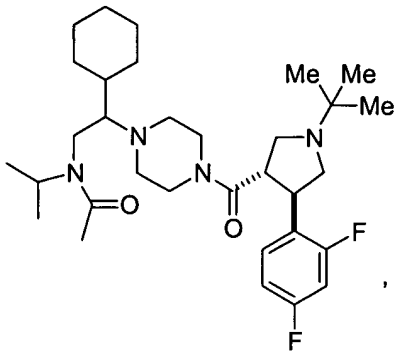
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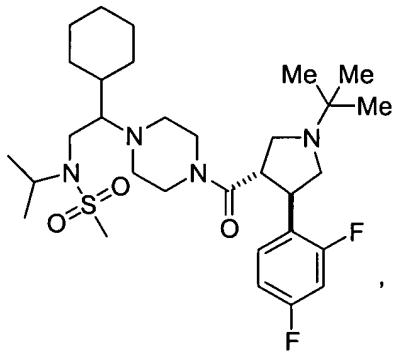
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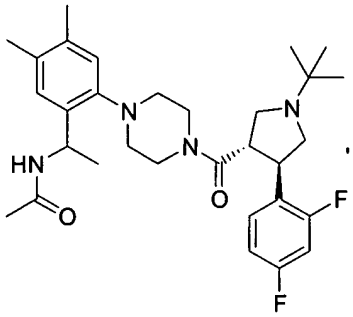
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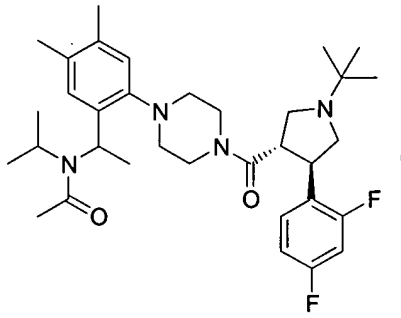
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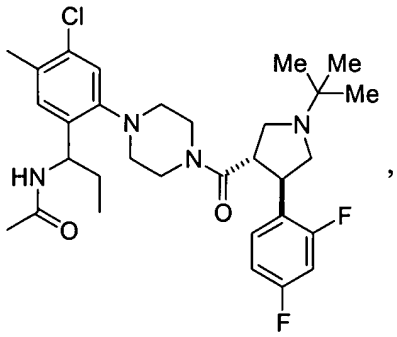
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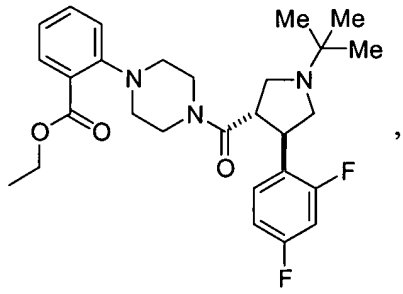
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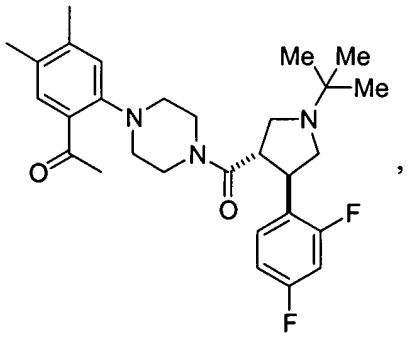
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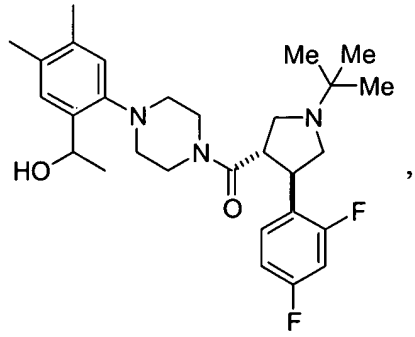
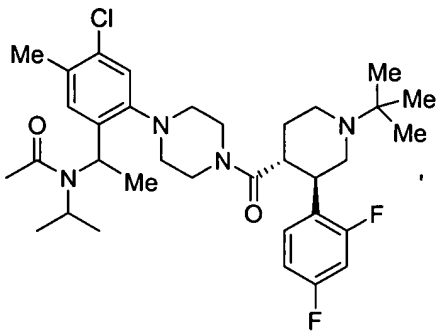
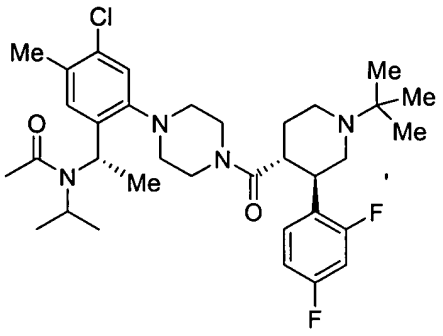
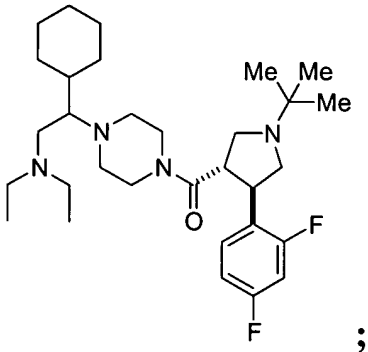


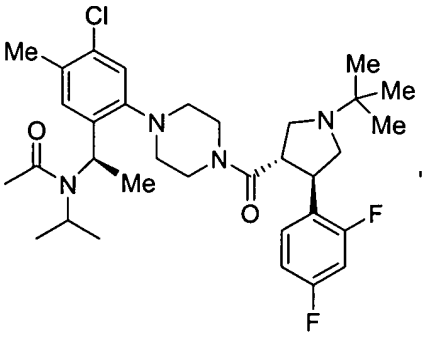
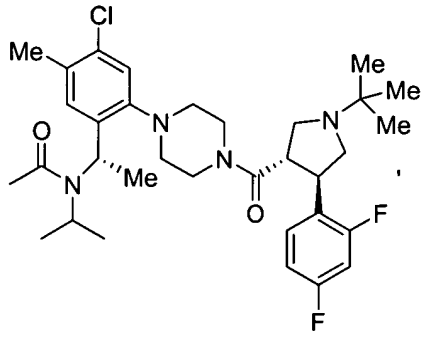
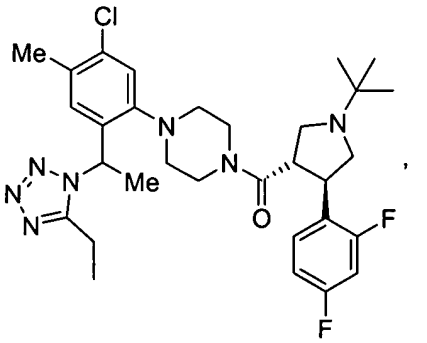
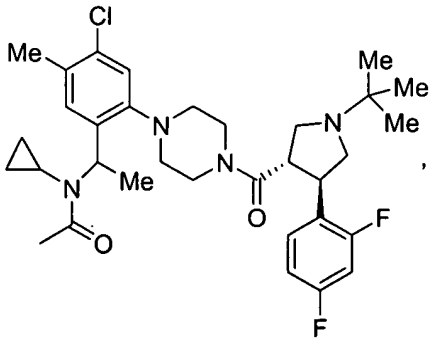
and

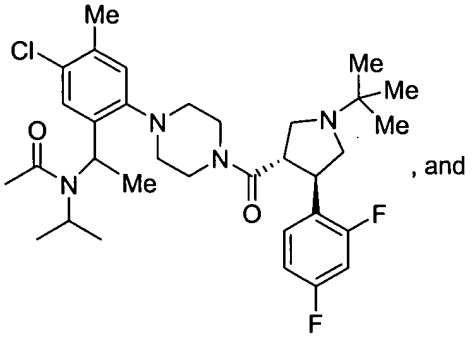


;

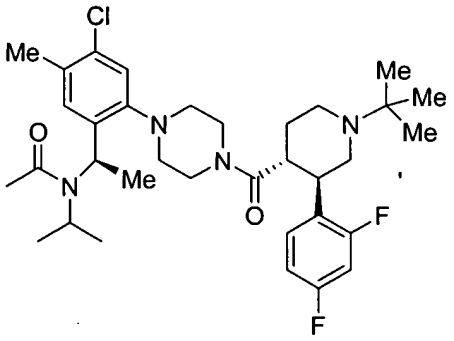
or a pharmaceutically acceptable salt thereof.

19. (original) The compound of Claim 1 selected from the group consisting of:



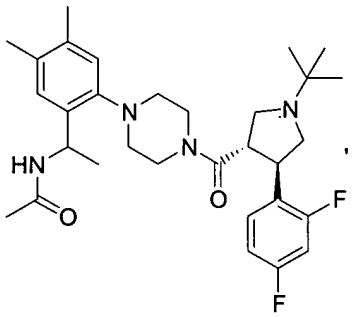
, and



,

or a pharmaceutically acceptable salt thereof.

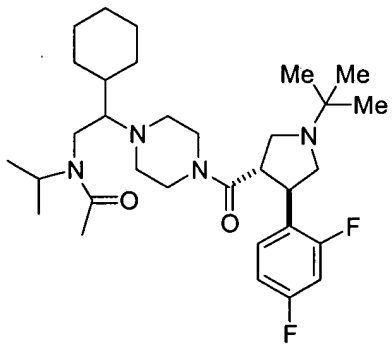
20. (original) The compound of Claim 18 which is:



,

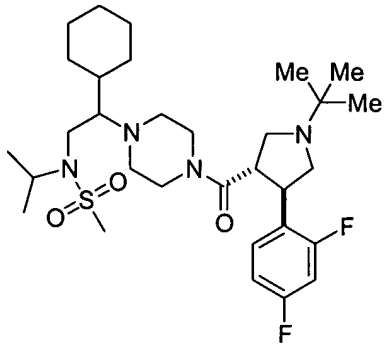
or a pharmaceutically acceptable salt thereof.

21. (original) The compound of Claim 18 which is:



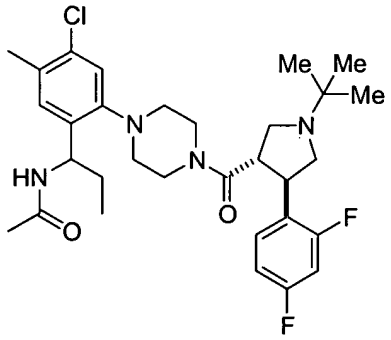
or a pharmaceutically acceptable salt thereof.

22. (original) The compound of Claim 18 which is:



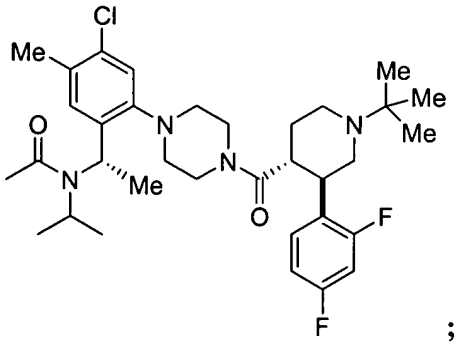
or a pharmaceutically acceptable salt thereof.

23. (original) The compound of Claim 18 which is:



or a pharmaceutically acceptable salt thereof.

24. (original) The compound of Claim 18 which is:



;

or a pharmaceutically acceptable salt thereof.

25. (original) A method for the treatment or prevention of disorders, diseases or conditions responsive to the activation of the melanocortin-4 receptor in a mammal in need thereof which

comprises administering to the mammal a therapeutically or prophylactically effective amount of a compound according to Claim 1.

26. (original) A method for the treatment or prevention of obesity in a mammal in need thereof which comprises administering to the mammal a therapeutically or prophylactically effective amount of a compound according to Claim 1.

27. (original) A method for the treatment or prevention of diabetes mellitus in a mammal in need thereof comprising administering to the mammal a therapeutically or prophylactically effective amount of a compound according to Claim 1.

28. (original) A method for the treatment or prevention of male or female sexual dysfunction in a mammal in need thereof comprising administering to the mammal a therapeutically or prophylactically effective amount of a compound according to Claim 1.

29. (original) A method for the treatment or prevention of erectile dysfunction in a mammal in need thereof comprising administering to the mammal a therapeutically or prophylactically effective amount of a compound according to Claim 1.

30. (original) A pharmaceutical composition which comprises a compound of Claim 1 and a pharmaceutically acceptable carrier.

31. (original) The pharmaceutical composition of Claim 30 further comprising a second active ingredient selected from the group consisting of an insulin sensitizer, an insulin mimetic, a sulfonylurea, an α-glucosidase inhibitor, a HMG-CoA reductase inhibitor, a serotonergic agent, a β3-adrenoreceptor agonist, a neuropeptide Y1 antagonist, a neuropeptide Y5 antagonist, a pancreatic lipase inhibitor, a cannabinoid CB_1 receptor antagonist or inverse agonist, a melanin-concentrating hormone receptor antagonist, a bombesin receptor subtype 3 agonist, and a ghrelin receptor antagonist.

32. (original) The pharmaceutical composition of Claim 30 further comprising a second active ingredient selected from the group consisting of a type V cyclic-GMP-selective phosphodiesterase inhibitor, an α_2-adrenergic receptor antagonist, and a dopaminergic agent.

33. (original) A method of treating erectile dysfunction in a mammal in need thereof comprising administering to the mammal a therapeutically effective amount of the composition of Claim 30.

34. (original) A method of treating erectile dysfunction in a mammal in need thereof comprising administering to the mammal a therapeutically effective amount of a compound of Claim 1 in combination with a type V cyclic-GMP-selective phosphodiesterase inhibitor, an α_2-adrenergic receptor antagonist, or a dopaminergic agent.

35. (original) A method of treating diabetes in a mammal in need thereof comprising administering to the mammal a therapeutically effective amount of the composition of Claim 30.

36. (original) A method of treating obesity in a mammal in need thereof comprising administering to the mammal a therapeutically effective amount of the composition of Claim 30.

37. (original) A method of treating diabetes or obesity in a mammal in need thereof comprising administering to the mammal a therapeutically effective amount of a compound of Claim 1 in combination with an insulin sensitizer, an insulin mimetic, a sulfonylurea, an α-glucosidase inhibitor, a HMG-CoA reductase inhibitor, a serotonergic agent, a β3-adrenoreceptor agonist, a neuropeptide Y1 antagonist, a neuropeptide Y5 antagonist, a pancreatic lipase inhibitor, a cannabinoid CB_1 receptor antagonist or inverse agonist, a melanin-concentrating hormone receptor antagonist, a bombesin receptor subtype 3 agonist, or a ghrelin receptor antagonist.

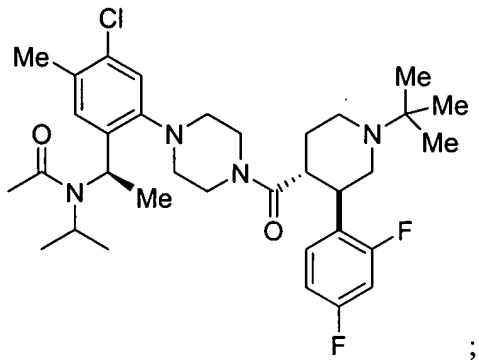
38. (original) The compound of Claim 1 wherein the pharmaceutically acceptable salt thereof is the hydrochloride salt.

39. (original) The compound of Claim 1 wherein the pharmaceutically acceptable salt thereof is the trifluoroacetic acid salt.

40. (original) The compound of Claim 1 wherein the pharmaceutically acceptable salt thereof is the bis phosphate salt.

Claims 41 – 46 (cancelled)

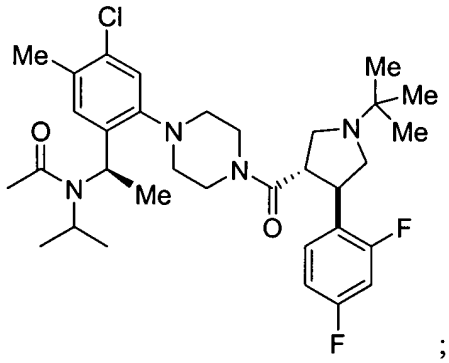
47. (new) The compound of Claim 19 which is:



;

or a pharmaceutically acceptable salt thereof.

48. (new) The compound of Claim 19 which is:



;

or a pharmaceutically acceptable salt thereof.